PATENTS If W

### IN THE UNITED STATES PATENT AND TRADMARK OFFICE

Applicants: Xin, et al.

Serial No.: 10/771,926

Filed: February 4, 2004

Title: PROTEIN-TYROSINE

PHOSPHATASE INHIBITORS AND USES

THEREOF

Case No.: 7041US02

Group Art No.: 1614

Examiner: (not yet assigned)

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to the:

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Date

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

#### TRANSMITTAL LETTER

Dear Sir:

Enclosed herewith for the patent application identified above entitled PROTEIN-TYROSINE PHOSPHATASE INHIBITORS AND USES THEREOF are the following:

- 1. Information Disclosure Statement;
- 2. Form PTO 1449, in duplicate;
- 3. References as cited on PTO 1449 (21 references); and
- 4. Return Receipt Postcard.

The Commissioner is hereby authorized to charge any additional Filing Fees required under 37 CFR §1.16, as well as any patent application processing fees under 37 CFR §1.17 associated with this communication for which full payment had not been tendered, to Deposit Account No. 01-0025.

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ABBOTT LABORATORIES Customer Number 23492

Telephone: (847) 935-7956 Facsimile: (847) 938-2623 Respectfully submitted, Xin, et al.

Johanna M. Corbin

Registration No. 51,582 Attorney for Applicants

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# **INFORMATION DISCLOSURE STATEMENT**

Dear Sir:

Pursuant to 37 C.F.R. §§ 1.56 and 1.97(b), Applicants bring to the attention of the Examiner the documents listed on the attached PTO 1449. This Information Disclosure Statement is being filed, to the knowledge of the undersigned, before the mailing date of a first Office Action on the merits. Applicants respectfully petition and request that the Examiner consider the listed documents and evidence such consideration by making appropriate notations on the attached form. Copies of the listed documents are attached.

Applicants further reserve the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

The Commissioner is authorized to charge our Deposit Account any additional fees (or credit any over payments) that may be required under 37 C.F.R. §§ 1.16 and 1.17 in association with this communication for which full payment has not been tendered.

Respectfully submitted,

Xin, et al.

ABBOTT LABORATORIES

Customer Number 23492 Telephone: (847) 935-7956 Facsimile: (847) 938-2623

Jøhanna M. Corbin

Registration No. 51,582 Attorney for Applicants Form PTO - 1449 (Modified)

FORM PTO-1449 (Modified)	U.S. DEPARTMENT OF SOMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO.	SERIAL NO.	
•		7041US02	10/771,926	
	INFORMATION DISCLOSURE	APPLICANT		
	STATEMENT BY APPLICANT	Zhili Xin, et al.		
	(Use several sheets if	FILING DATE	GROUP	
(37 CED 1 08 (b))	(Use several sheets if necessary)	February 4, 2004	1614	

# **U.S.PATENT DOCUMENTS**

EXAMINER INITIAL	J	PAT	ΈN	T NI	UMI	BER	·	1	SSUE DATE	PATENTEE	CLASS	SUB CLASS	FILING DATE

#### FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

	DO	DOCUMENT NUMBER			ER	PUBLI- CATION DATE		ANS- TION NO		
 B1	0	1	1	7	5	1	6	15.03.2001	/0	
B2	0	1	1	9	8	3	0	22.03.2001	/0	
B3	0	1	1	9	8	3	1	22.03.2001	/0	

# OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)

C1	Ahmad, F., et al., "Osmotic Loading of Neutralizing Antibodies Demonstrates a Role for Protein-tyrosine Phosphatase 1B in Negative Regulation of the Insulin Action Pathway (*)", Jour. Biol. Chem. 270(35):20503-20508 (1995
C2	Bryant, N. J., et al., "Regulated Transport of the Glucose Transporter Glut4", Nature Reviews, 3:267-277 (2002)
C3	Cheng, A., et al., "Coordinated action of protein tyrosine phosphatases in insulin signal transduction", Eur. J. Biochem.", 269:1050-1059 (2002)
C4	Dunstan, D. W., et al., "The Rising Prevalence of Diabetes and Impaired Glucose Tolerance: The Australian Diabetes, Obesity and Lifestyle Study", <i>Diabetes Care</i> , <b>25</b> (5)829-834 (2002)
C5	Elchebly, M., et al., "Increased Insulin Sensitivity and Obesity Resistance in Mice Lacking the portein Tyrosine Phosphatase-1B Gene", Science, 283:1544-1548 (1999)
C6	Flint, A. J., et al., "Multi-site phosphorylation of the protein tyrosine phosphatase, PTP1B: identification of cell cycle regulated and phorbol ester stimulated sites of phosphorylation", <i>The EMBO Jour.</i> , 12(5)1937-1946 (1993)
. C7	Goldstein, B. J., et al., "Tyrosine Dephosphorylation and Deactivation of Insulin Receptor Substrate-1 by Proteintyrosine Phosphatase 1B", Jour. Biol. Chem., 275(6):4283-4289 (2000)
C8	Groop, L. & Orho-Melander, M., "The dysmetabolic syndrome", Jour. of Internal Med., 250:105-120 (2001)
C9	Klaman, L. D., et al., "Increased Energy Expenditure, Decreased Adiposity, and Tissue-Specific Insulin Sensitivity in Protein-Tyrosine Phosphatase 1B-Deficient Mice", Molecular and Cellular Biol., 20(15):5479-5489 (2000)
C10	Mauro, L. J., et al., "Identification of a Hormonally Regulated Protein Tyrosine Phosphatase Associated with Bone and Testicular Differentiation", <i>The Journ. of Biol. Chem.</i> , 269:30659-30667 (1994)
C11	Noguchi, T., et al., "Role of SH-PTP2, a Protein-Tyrosine Phosphatase with Src Homology 2 Domains, in Insulin-Stimulated Ras Activation", Mol. and Cell. Biol., 14(10):6674-6682 (1994)
C12	Ostman, A. & Böhmer, F-D., "Regulation of receptor tyrosine kinase signaling by protein tyrosine phosphatases", Trends Cell Biol., 11:258-266 (2001)
C13	Saltiel, A. R., & Pessin, J. E., "Insulin signaling pathways in time and space", <i>Treands in Cell Biol.</i> , 12(2):65-71 (2001)
C14	Seely, L. B., et al., "Protein Tyrosine Phosphatase 1B Interacts With the Activated Insulin Receptor", diabetes, 4(10):1379-1385 (1996)
C15	Wang, Q., et al., "Mechanism of Inhibition of Protein-Tyrosine Phosphatases by Disodium Aurothiomalate", Biochem. Pharma., 54:703-711 (1997)

		tation considered. Draw line through citation if not in conformance and e copy of this form with next communication to applicant.
EXAMINER		DATE CONSIDERED
	C18	Zinker, B. A., et al., "PTP1B antisense oligonucleotide lowers PTO1B protein, normalizes blood glucose, and improves insulin sensitivity indiabetic mice", <i>Proc. Natl. Acad. Sci. USA</i> , 99(17):11357-11362 (2002)
	C17	Zabolotny, J. M., et al., "PTO1B Regulates Leptin Signal Transduction in ViVo", Developmental Cell, 2:489-495 (2002)
	C16	Wiener, J. R., et al., "Overexpression of the Protein Tyrosine Phosphatase PTP1B in Human Breast Cancer: Association With p185 <sup>c-erbB-2</sup> Protein Expression", Journ of the Nat'l Cancer Insti., 86(5):372-378 (1994)

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(Form PTO-1449)